



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,678	09/17/2003	Fu-Jen Ko	TOP 328	2488
23995	7590	09/07/2005	EXAMINER	
RABIN & Berdo, PC 1101 14TH STREET, NW SUITE 500 WASHINGTON, DC 20005			WANG, GEORGE Y	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/663,678	KO ET AL.	
	<b>Examiner</b> George Y. Wang	<b>Art Unit</b> 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 June 2005.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Wei et al. (U.S. Patent No. 6,831,718, hereafter “Wei”).

3. As to claims 1 and 7, Wei discloses a transreflective liquid crystal display (LCD) device (Fig. 6 and col. 1, lines 6-8) with a first substrate (210) and a second substrate (220), a first color filter (211) on the first substrate (210), a reflective electrode (212) on the first color filter (211) having one opaque portion (212b) with an uneven surface and a transparent portion (216) having an even surface over the cavity of the first color filter (col. 6, lines 19-24). Wei also discloses a second color filter (244) on the inner side of the second substrate (220), a common electrode (246) on the color filter (244) and a liquid crystal layer (230) between the first and the second substrates. Since the common electrode (246) is a transparent electrode such as an ITO electrode, as

disclosed by Wei (col. 7, line 5-7), it satisfies the limitation of a transparent electrode on the second filter as recited in claim 7.

4. As to claim 2 and 12-13, Wei discloses the transflective LCD as recited above further having an overcoat layer (295), i.e., an insulating layer, formed in between the first color filter (211) and the reflective electrode (212; col. 5, lines 37-41).

5. As to claims 3, 8, and 14, Wei teaches the transflective LCD as recited above where the first substrate (210) comprises a thin film transistor (TFT) array (Figs. 2-6).

6. As to claims 4, 9, and 15, Wei discloses the transflective LCD as recited above where the reflective electrode (212) is made of aluminum (col. 4, line 62) and has uneven surface as can be seen from Fig. 6.

7. As to claims 5, 10, and 16, Wei discloses the transflective LCD as recited above where the transparent portion of the reflective electrode (216) is made of ITO (col. 4, line 63).

8. As to claims 6, 11, and 17, Wei discloses the transflective LCD as recited above where the partial surfaces of the first color filter (211) have bumps, as can be seen from (Fig. 6).

***Response to Arguments***

9. Applicant's arguments filed June 22, 2005 have been fully considered but they are not persuasive.

Applicant amends independent claims 1 and 7 to include the limitation that the reflective between the first and second color filters and where at least one opaque portion has an uneven surface and at least one transparent portion has an even surface. However, these amendments do not overcome the rejection by the Wei reference as recited above. Although Applicant argues that the Wei reference fails to teach (1) a transparent portion having an even surface and (2) an insulating layer formed on the first color filter, the Wei reference clearly teaches each of the limitations. In col. 6, lines 19-24, Wei clearly teaches a transparent portion (216) having an even surface over the cavity of the first color filter, which also has an even surface. In col. 5, lines 36-43, Wei clearly teaches an insulating layer formed on the first color filter and a reflective electrode on the insulating layer (overcoat layer, ref. 295). As a result, neither Applicant's amendments nor remarks places the claims in condition for allowance; thus rejection is proper.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2871

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Y. Wang whose telephone number is 571-272-2304. The examiner can normally be reached on M-F, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gw  
September 5, 2005



DUNG T. NGUYEN  
PRIMARY EXAMINER